

Application No. 10/809,789

REMARKS

Reexamination and reconsideration of this application is respectfully requested in light of the foregoing amendments to the claims and the following remarks.

Claims 1-17 are pending in this application. No new claims have been added. Claims 1, 4, 5 and 12-17 have been amended. No new matter has been added to the application by the amendments. The amendments have been made in response to the Examiner's objection of claims, as discussed *infra*.

Applicant notes the Examiner's consideration of the information cited in the Information Disclosure Statements filed March 26, 2004, November 3, 2005 and February 16, 2006 as acknowledged in the Office Action Summary. Applicant further notes the Examiner's acknowledgment of Applicant's claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified priority document as well as acceptance of the drawings filed March 26, 2004.

Objection to the Claims

Claims 1, 4, 5 and 12-17 have been objected to because the symbol "/" is indefinite. The objected to claims have been amended to delete the symbol and to clarify its meaning. The amendments are supported by page 11, lines 14-17 of the specification. It is believed that by the amendment to the claims, the objection is overcome. It is respectfully requested that the objection be reconsidered and withdrawn.

Rejection of the Claims for Obviousness

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawada et al. (U.S. Patent No. 7,120,251) in view of Ishibashi et al. (U.S. Patent No. 7,099,479). Claims 1, 4 and 12 are independent claims. Claim 1 is directed to a host device for inputting or

Application No. 10/809,789

outputting data to a storage device, claim 4 is directed to a storage device, and claim 12 is directed to a method for encrypting data to be secured and inputting or outputting the data between a storage device for storing data and a host device, respectively.

The device of claim 1 requires a controller that encrypts data to be sent to a storage device, processes the data through a plurality of procedures, and issues to the storage device a command to execute a procedure. The claim requires that, prior to the issuance of a command, the controller obtains information from the storage device estimating the time necessary to execute the command. The claim further requires that the controller set a wait time based on the information received from the storage device before it issues the next command to the storage device. According to the Examiner, Kawada et al. disclose a controller having these functions even though the reference fails to explicitly disclose a plurality of procedures as required by the claim. According to the Examiner,

it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system disclosed by Kawada to include a plurality of procedures. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide an information sending system, an information distribution system, an information sending device, an information receiving device, an information sending method, an information receiving method and a program storing medium that are capable of prevention piracy of contents with a simple configuration as suggested by Ishibashi ...

Applicant respectfully traverses the rejection of claim 1 and the claims dependent thereon.

The rejection of claim 1 merely parrots the language of claim 1 without explaining how and why the passages relied upon in Kawada et al. meet the elements of the claim. Kawada et al. is directed to a data player, a playback system, a data embedding apparatus, and an embedded data detection apparatus. The reference discloses a system for reading encrypted data using a

Application No. 10/809,789

decoding key, decoding the data from a digital medium and playing the data. According to Kawada et al., at col. 26, lines 48-67:

... a decoding means 231 extracts the data indicating time or the like from the data embedded in the stream and outputs timing data, and a control means 211 transmits the timing data through a transmission means 271 of a control data transmission apparatus 270 to a key transmission means 272. The key transmission means 272 calculates the key transmission timing from the timing data, and outputs an encrypted key. The transmission means 271 transmits the encrypted key, the real time data outputted from the real time data measuring means 221, and the real position data outputted from the real position measuring means 222 to the control means 211 of the data player 207. The control means 211 generates a key from the encrypted key received, and outputs it to the decoding means 231. At the same time, the control means 211 outputs the received real time data and real position data to the data embedding means 220. In this construction, the data player 207 cannot obtain the key for decoding encryption and therefore cannot play the stream unless it receives the real time data and the real position data.

Kawada et al. does not disclose, let alone suggest, that prior to executing a sequence of commands, a controller obtains information from the storage device estimating the time necessary to execute a first command, and that after receiving the information, the controller sets a wait time before sending a second or next command to the storage device. In the system described by Kawata et al., a decoding means extracts timing data, but this data is not a period of time before executing a command. The timing data extracted is transmitted via a controller to a key transmission means. The reference does not disclose two way communications between the controller 211 and the decoding means 231 or to a data storage means. The controller in Kawata et al. is not sending commands to a storage device as required by claim 1.

The Examiner concedes that Kawada et al. do not disclose a plurality of procedures as required by claim 1, i.e., the Examiner concedes that the controller in Kawada et al. does not

Application No. 10/809,789

transmit multiple commands. For this deficiency, the Examiner relies on Ishibashi et al. The passage relied on in the reference states:

The present invention ... proposes an information sending system, an information distribution system, an information sending device, an information receiving device, an information sending method, an information receiving method and a program storing medium that are capable of preventing piracy of contents with a simple configuration.

This passage is non-descript. It does not recited what the systems, devices, methods and the storing medium are. The Rejection does not explain how Kawada et al. can modified to by the teachings of Ishibashi et al. The conclusion of obviousness is merely a conclusion without cogent reasons as to the system of Kawada et al. can be modified to have a controller in Kawada et al. execute multiple commands to a storage device by using an data from the storage device to building a wait time between commands. Further Ishibashi et al. do not disclose the elements of claim 1 as set forth above, as evident by the fact that the Examiner did rely on the reference for the recited elements.

As for the claims 2 and 3, which are dependent on claim 1, the rejection of the claims merely parrots the language in these claims without explaining how and why the passages from Kawada et al. recited upon in the rejection meet the limitations recited in the dependent claims. The Examiner did not rely on Ishibashi et al. as teaching the limitations set forth in the dependent claims.

As for independent claim 4, the rejection merely parrots the language of the claim without any cogent reasoning how and why the passages relied upon in Kawada et al. meet the limitations set forth in the claim. Claim 4 is directed to a storage device and requires (i) a storage medium which stores data, (ii) a controller which receives a command from a host

Application No. 10/809,789

device, and (iii) a cryptographic processing unit which executes the command. The claim further requires that in response to a request from the host device, the controller provides information from which the host device estimates the time necessary for the cryptographic processing unit to execute the command. Applicant respectfully traverses the rejection of claim 4 and the claims dependent thereon.

According to the Examiner, the elements of claim 4 are set forth at col. 4, lines 1-15 and lines 45-60; col. 5, lines 5-21; col. 9, lines 45-64; col. 12, lines 30-45;; col. 23, lines 30-57, and Fig. 1, elements 11, 12, 101, 102, 103, 104, 105, 107 and 108 of Kawata et al. The rejection identifies element reference numerals for Fig. 1, but it does not identify which of these elements the Examiner considers to represent the storage device, host device, controller and cryptographic processing unit as required by claim 4. The passages relied upon by the Examiner are directed to the decoding process and, except for the passage in col. 9, none of the passages refer to the elements in Fig. 1. The reference to Fig. 1 in col. 9 refers to the controller 11 as performing authentication to allow the DVD player to read the contents key decoding key. There is no disclosure, let alone a suggestion, in any of the passages relied upon that controller 11 provides information from which a host device estimates the time necessary for the cryptographic processing unit to execute the command. The Rejection provides no explanation of how the passages and Fig. 1 relied upon meet the elements of claim 4.

The Examiner's conclusion of obviousness is the same as that set forth for claim 1 *supra*, i.e., the Examiner concedes that Kawata et al. fails to disclose a plurality of procedures and relies on a broad disclosure of Ishibashi et al. to conclude that Kawata et al. can be modified by Ishibashi et al. However, the Rejection fails to provide cogent reasoning as to how this can be

Application No. 10/809,789

accomplished following the teachings of Kawata et al. and Ishibashi et al. Further Ishibashi et al. do not disclose the elements of claim 4 as set forth above, as evident by the fact that the Examiner did rely on the reference for the recited elements.

As for the claims 5-11 which are ultimately dependent on base claim 4, the rejection of the claims merely parrots the language in these claims without explaining how and why the passages from Kawada et al. recited in the Rejection meet the limitations recited in the dependent claims. The Examiner did not rely on Ishibashi et al. as teaching the limitations set forth in the dependent claims.

Independent claim 12 is directed to a method for executing cryptographic processing between a storage device for storing data and a host device. The method comprises the steps of (i) dividing the cryptographic processing into a plurality of procedures and making the host device execute a procedure to be executed, (ii) allowing the host device to issue a command to the storage device in order to make the storage device execute a procedure, (iii) allowing the storage device to receive the command, and (iv) allowing the storage device to execute the command. The claim further requires that the host device obtain information from the storage device, prior to the issuance of the command, estimating the time necessary for the storage device to execute the command; (ii) after receiving the information, issuing the command to the storage device; and (iii) waiting for a period of time based on the estimate received from the storage device before issuing to the storage device a command for the next procedure in the cryptographic processing. The rejection merely parrots the language of the claim without providing any cogent reasoning as to how and why the passages relied upon in Kawada et al.

Application No. 10/809,789

meet the limitations set forth in the claim. Applicant respectfully traverses the rejection of claim 12 and the claims dependent thereon.

According to the Examiner, the elements of claim 12 are set forth at col. 9, lines 45-64; col. 23, lines 30-57; col. 26, lines 49-64; and Fig. 1, elements 10, 11, 101, 104, 105, 107 and 108 of Kawada et al. The rejection identifies element reference numerals for Fig. 1, but does not explain how and why the elements in Fig. 1 relate to the method steps set forth in claim 12. The rejection does not explain which elements in the Fig. 1 in Kawata et al. represent the host device and storage device as required by claim 12. The Office Action does not explain how the elements in Fig. 1 and the specific passages relied upon in Kawata et al. disclose or suggest the claimed steps of (i) dividing the cryptographic processing into a plurality of procedures, and making the host device execute a procedure to be executed, (ii) allowing the host device to issue a command to the storage device in order to make the storage device execute a procedure, (iii) allowing the storage device to receive the command, and (iv) allowing the storage device to execute the command as required by the claim. None of the passages relied upon disclose the specific sequence of steps recited in claim 12. Further, the passages relied upon by the Examiner in Kawata et al. merely discuss the using authentication to read a decoding key. The rejection does not explain how the passages disclose or suggest a host device obtain information from the storage device, prior to the issuance of the command, estimating the time necessary for the storage device to execute the command; (ii) after receiving the information, issuing the command to the storage device; and (iii) waiting for a period of time based on the estimate received from the storage device before issuing to the storage device a command for the next procedure in the cryptographic processing.

Application No. 10/809,789

The Examiner's conclusion of obviousness is the same as that set forth for claims 1 and 4 *supra*, i.e., the Examiner concedes that Kawata et al. fails to disclose a plurality of procedures and relies on a broad disclosure of Ishibashi et al. to conclude that Kawata et al. can be modified by Ishibashi et al. However, the Office Action fails to provide cogent reasoning as to how this can be accomplished following the teachings of Kawata et al. and Ishibashi et al. Further Ishibashi et al. do not disclose the elements of claim 12 as set forth above, as evident by the fact that the Examiner did rely on the reference for the recited elements.

As for the claims ultimately dependent on base claim 12, the rejection of the claims merely parrots the language in these claims without explaining how and why the passages from Kawada et al. recited in the Office Action meet the limitations recited in the dependent claims. The Examiner did not rely on Ishibashi et al. as teaching the limitations set forth in the dependent claims.

For all of the foregoing reasons, the Examiner has not established a *prima facie* case of obviousness of claim 1-17 over the teachings of Kawada et al. and Ishibashi et al. Accordingly, it is respectfully requested that the rejection of claims 1-17 for obviousness be reconsidered and withdrawn.

Conclusion

It is submitted that the claims 1-17 are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.

RECEIVED
CENTRAL FAX CENTER

JUN 01 2007

Application No. 10/809,789

If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. § 1.17 and due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY LLP



Cameron K. Weiffenbach

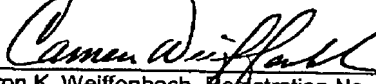
Registration No. 44,488

**Please recognize our Customer No. 20277
as our correspondence address.**

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 CKW:ckw
Facsimile: 202.756.8087
Date: June 1, 2007

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper (including any paper referred to as being attached or enclosed) is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.



Cameron K. Weiffenbach, Registration No. 44,488

Date: June 1, 2007